

REMARKS

This application has been carefully reviewed in light of the Office Action dated October 31, 2005. Claims 1 to 20 and 26 to 29, and 31 to 34 are pending in the application, Claims 8 to 13, 18, 26, 28 and 32 having been withdrawn from consideration. Of the claims currently under consideration, Claims 1, 14, 16, 19, 20, 27, 29, 31, 33 and 34 are independent. Reconsideration and further examination are respectfully requested.

Claims 1 to 3, 6, 7, 14 to 17, 21, 27, 29, 31 and 33 were rejected under 35 U.S.C. § 102(e) over U.S. Patent Application Publication 2001/0013897 (Kowno). Claims 4, 5, 19, 20 and 22 to 24 were rejected under 35 U.S.C. § 103(a) over Kowno in view of U.S. Patent No. 6,707,467 (Suga). Claims 25, 30 and 34 were rejected under 35 U.S.C. § 103(a) over Kowno in view of U.S. Patent No. 6,876,387 (Lee), and in further view of U.S. Patent No. 6,327,306 (Sugiyama). Reconsideration and withdrawal of these rejections are respectfully requested.

Turning to specific claim language, amended independent Claim 1 is directed to an imaging apparatus which includes an imaging unit which generates, by capturing an image of a subject, an image signal corresponding to an image having an arbitrary number of H pixels by W pixels which is not greater than a predetermined number of P pixels by Q pixels in vertical and horizontal directions; an enlarging unit which generates an enlarged image signal corresponding to an enlarged image having the number of P pixels by Q pixels by performing enlargement processing on the image signal having the number of H pixels by W pixels generated by the imaging means; and a reducing unit which generates a reduced image signal corresponding to a reduced image having a predetermined number of M pixels by N pixels by performing reduction processing on the enlarged image signal corresponding to the enlarged image having the number of P pixels by Q pixels.

In contrast, Kowno fails to disclose or suggest generating, by capturing an image of a subject, an image signal corresponding to an image having an arbitrary number of H pixels by W pixels which is not greater than a predetermined number of P pixels by Q pixels in vertical and horizontal directions. Instead, Kowno discloses creation of an enlarged image, such as shown in FIG. 9, by changing the focal length of a shooting lens in a camera. (See Kowno, Paragraph 78.)

Furthermore, Kowno fails to disclose or suggest generating a reduced image signal corresponding to a reduced image having a predetermined number of M pixels by N pixels by performing reduction processing on the enlarged image signal corresponding to the enlarged image having the number of P pixels by Q pixels. Instead, Kowno discloses the use of thumbnail images, such as shown in the user interface of Fig. 7. These thumbnail images are generated by reducing the image data stored in memory card 24 and nothing more. Kowno fails to disclose or suggest that a thumbnail image is generated by reducing an enlarged image as featured in Claim 1. (See Kowno, Paragraph 112).

In light of the deficiencies of Kowno as discussed above, Applicant submits that amended independent Claim 1 is now in condition for allowance and respectfully requests same.

Amended independent Claims 27 and 31 are directed to a method and computer-readable medium, respectively, substantially in accordance with the apparatus of Claim 1.

Accordingly, Applicant submits that Claims 27 and 31 are also now in condition for allowance and respectfully requests same.

Amended Claim 14 is directed to an imaging apparatus comprising an imaging means for generating an image signal corresponding to an arbitrary image size equal to or smaller than a first predetermined image size, the generated image signal being converted into an image

signal corresponding to a second predetermined size by said imaging apparatus; an enlarging means for performing enlargement processing on said image signal generated by said imaging means so that an image signal corresponding to said first predetermined image size is generated; a reducing means for performing reduction processing on said image signal generated by said enlarging means so that an image signal corresponding to said second predetermined image size is generated; and a recording means for recording the image signal corresponding to said second predetermined image size generated by said reducing means on a recording medium.

In contrast, as discussed above, Kowno fails to disclose or suggest generating an image signal corresponding to an arbitrary image size equal to or smaller than a first predetermined image size, the generated image signal being converted into an image signal corresponding to a second predetermined size and performing enlargement processing on the image signal so that an image signal corresponding to the first predetermined image size is generated, and performing reduction processing on the image signal generated so that an image signal corresponding to the second predetermined image size is generated. Furthermore, Kowno fails to disclose or suggest recording the image signal corresponding to said second predetermined image size generated by said reducing means on a recording medium. Instead, Kowno merely discloses enlarging an image using optical means and generating a thumbnail image from an image stored in memory without storing the thumbnail image on a recording medium.

In light of the deficiencies of Kowno as discussed above, Applicant submits that amended independent Claim 14 is now in condition for allowance and respectfully requests same.

Amended independent Claims 29 and 33 are directed to a method and computer-readable medium, respectively, substantially in accordance with the apparatus of Claim 14.

Accordingly, Applicant submits that Claims 29 and 33 are also now in condition for allowance and respectfully requests same.

Amended independent Claim 16 is directed to an imaging apparatus comprising: an imaging means having an electronic zoom function; an enlarging means for performing enlargement processing on an image signal generated by said imaging means by using a variable magnification in accordance with a magnification used in said electronic zoom function; a reducing means for performing reduction processing on the image signal processed by said enlarging means by using a fixed factor; and recording means for recording the image signal corresponding to said second predetermined image size generated by said reducing means on a recording medium.

Amended independent Claim 19 is directed to an imaging apparatus comprising an imaging means for generating, by capturing an image of a subject, an image signal corresponding to an image having an arbitrary number of H pixels by W pixels which is not greater than a predetermined number of P pixels by Q pixels in vertical and horizontal directions, an enlarging means for generating an enlarged image signal corresponding to an enlarged image having the number of P pixels by Q pixels by performing cubic convolutional interpolation processing on the image signal having the number of H pixels by W pixels generated by said imaging means, a reducing means for generating a reduced image signal corresponding to a reduced image having a predetermined number of M pixels by N pixels by performing finite-impulse-response filtering on the enlarged image signal corresponding to the enlarged image having the number of P pixels by Q pixels; and a recording means for recording the image

signal having the number of M pixels by N pixels generated by said reducing means on a recording medium.

Amended independent Claim 20 is directed to an imaging apparatus comprising an imaging means for generating, by capturing an image of a subject, an image signal corresponding to an image having an arbitrary number of H pixels by W pixels which is not greater than a predetermined number of P pixels by Q pixels in vertical and horizontal directions, an enlarging means for generating an enlarged image signal by performing linear-interpolation processing on the image signal having the number of H pixels by W pixels generated by said imaging means, a reducing means for generating a reduced image signal corresponding to a reduced image having a predetermined number of M pixels by N pixels by performing finite-impulse-response filtering on the enlarged image signal corresponding to the enlarged image having the number of P pixels by Q pixels, and a recording means for recording the image signal having the number of M pixels by N pixels generated by said reducing means on a recording medium.

Amended independent Claim 34 is directed to a computer-readable storage medium storing a program for controlling a computer to execute a process for generating an interlaced image signal from an imaging device corresponding to an interlaced image having a predetermined number of M pixels in the vertical direction by converting an input interlaced image signal corresponding to an interlaced image having an arbitrary number of H pixels which is not greater than a predetermined number of P pixels in the vertical direction of one field. The process comprises an enlarging step for generating a progressive image signal corresponding to a progressive image having the number of P pixels in the vertical direction by performing enlargement processing on said input interlaced image signal, corresponding to the image having

said arbitrary number of H pixels by W pixels, in units of fields, a reducing step for generating an interlaced image signal corresponding to an interlaced image having the number of M pixels by performing reduction processing on the generated progressive image signal in units of frames, and a recording step for recording the image signal corresponding to the image having the number of M pixels by N pixels generated in said reduction step on a recording medium.

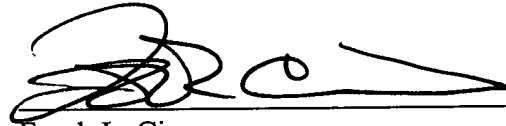
As discussed above in regard to Claim 14, Kowno fails to disclose or suggest generating an image signal, performing enlargement processing on the image signal, performing reduction processing on the image signal and recording the reduced image signal on a recording medium.

In light of the deficiencies of Kowno as discussed above, Applicant submits that amended independent Claims 16, 19, 20 and 34 are in condition for allowance and respectfully requests same.

The other pending claims in this application are each dependent from the independent claims discussed above and are therefore believed allowable for at least the same reasons. Because each dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration of each claim on its own merits is respectfully requested.

Applicant's undersigned attorney may be reached in our Costa Mesa, CA office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Frank L. Cire', written over a horizontal line.

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